

THE AMERICAN GENERA OF ASILIDAE (DIPTERA): KEYS FOR IDENTIFICATION WITH AN ATLAS OF FEMALE SPERMATHECAE AND OTHER MORPHOLOGICAL DETAILS. VII.1. SUBFAMILY STENOPOGONINAE HULL. A PRELIMINARY CLASSIFICATION INTO TRIBES*

LOS GENEROS AMERICANOS DE ASILIDAE (DIPTERA): CLAVES PARA SU IDENTIFICACION CON UN ATLAS DE LAS ESPERMATECAS DE LAS HEMBRAS Y OTROS DETALLES MORFOLOGICOS. VII.1. SUBFAMILIA STENOPOGONINAE HULL. UNA CLASIFICACION PRELIMINAR EN TRIBUS

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ABSTRACT

The American genera of Stenopogoninae Hull (Diptera, Asilidae) are typologically arranged into 12 tribes: Acronychini, new (1 genus), Bathypogonini, new (1 new genus), Ceraturgini, new (2 genera), Cyrtopogonini, new (21 genera, 4 of which new), Dioctriini Hull, 1962 (2 genera), Echthodopini Adisoemarto & Wood, 1975 (5 genera), Enigmomorphini Hull, 1962 (14 genera, 3 of which new), Phellini Hull, 1962 (1 genus), Plesiommatini, new (3 genera), Stenopogonini Hull, 1962 (3 genera), Tillobromini, new (7 genera, 3 of which new) and Willistonini, new (1 genus).

KEYWORDS: Insecta. Taxonomy. America. Key. Asilidae. Stenopogoninae. Tribes.

RESUMEN

Los géneros americanos de Stenopogoninae Hull (Diptera, Asilidae) son tipológicamente organizados en 12 tribus: Acronychini, nueva (1 género), Bathypogonini, nueva (1 género nuevo), Ceraturgini, nueva (2 géneros), Cyrtopogonini, nueva (21 géneros, 4 de los cuales son nuevos), Dioctriini Hull, 1962 (2 géneros), Echthodopini Adisoemarto & Wood, 1975 (5 géneros), Enigmomorphini Hull, 1962 (14 géneros, 3 de los cuales son nuevos), Phellini Hull, 1962 (1 género), Plesiommatini, nueva (3 géneros), Stenopogonini Hull, 1962 (3 géneros), Tillobromini, nueva (7 géneros, 3 de los cuales son nuevos) y Willistonini, nueva (1 género).

PALABRAS CLAVES: Insecta. Taxonomía. América. Clave. Asilidae. Stenopogoninae. Tribus.

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INTRODUCTION

This is part VII.1. of a series of papers intended as a preliminary effort to define the American genera of Asilidae, describing the new genera, preparatory to the elaboration of the catalogue of Neotropical species for inclusion in the projected World Catalog of Flies, now being prepared by

the U.S. Department of Agriculture and the U.S. National Museum of Natural History, Washington, D.C.

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MATERIALS AND METHODS

The material used in this series belongs to the Museu de Zoologia da Universidade de São Paulo, Brasil, and to the Departamento de Zoología, Universidad de Concepción, Chile (MZUC).

The methodology employed in the dissection and preservation of the male terminalia, female spermathecae and other morphological parts is the same employed by Artigas (1971).

PRELIMINARY REMARKS AND KEY TO TRIBES

The Stenopogoninae are an artificial group, based solely on symplesiomorphies. Much remains to be done in this group. In order to facilitate identification, we are herein organizing this highly heterogeneous assemblage of genera into 12 tribes, accepting those previously proposed. This new arrangement is merely a matter of convenience - some of the tribes proposed are apparently monophyletic; others are simply aggregates of genera artificially united.

KEY TO TRIBES:

- 1. Face extremely narrow. Head, in frontal view, clearly circular and notoriously narrower than thorax. Second and third flagellomeres present or absent. Female terminalia with acanthophorites present or absent STENOPOGONINI Hull, 1962
- Face normally wider (if somewhat narrow, then triangular, as in Plesiommatini and Acronichini) and head never circular and narrower than thorax 2
- 2(1). Antenna with 3 flagellomeres 3
- Antenna with 1 or 2 flagellomeres 6
- 3(2). Cell m_2 extremely wide, over twice as wide as high. Large flies (25-35 mm). Face gradually sloping from antennae to oral margin. Proboscis very long and slender, much longer than length of bristles of mystax or height of face. Occiput entirely covered with dense bristles and bristle-like hairs. Wings slightly longer than abdomen. Humeri with several strong bristles. Femora slender. Pleura pilose, especially above coxae BATHYPOGONINI, new
- Cell m_2 distinctly trapezoidal, higher than wide. Medium to small-sized flies. Other combination of characters 4

- 4(3). Antennal stylus very robust, pubescent, as wide as or wider than first flagellomere
 CERATURGINI, new
 Antennae never as above 5
- 5(4). Face, in frontal view, distinctly triangular PLESIOMMATINI, new
 Face never triangular in frontal views CYRTOPOGONINI, new
- 6(2). Veins CuA₁ and M₃ ending separately at wing margin (i. e., cell m₃ open) (if cell m₃ closed, veins CuA₁ and M₃ meet only at wing margin, or, as in *Zabrotica* Hull, second flagellomere broad and thick, fused or absent and vertex unescavated). First flagellomere normally without small bristles on lower dorsal surface. Second flagellomere present or absent. Cell r₁ open 7
 Veins CuA₁ and M₃ fused before wing margin (i. e., cell m₃ closed and petiolate). First flagellomere normally with small bristles on lower dorsal surface. Cell r₁ open or closed 11
- 7(6). Pulvilli and empodium absent. Proboscis thick, blunt and rounded at apex. Face triangular in frontal view, more or less short, due to the great height of oral margin. Frons narrowing towards apex, upper margin of eyes separated by a very short distance. Body pollinose ACRONYCHINI, new
 Pulvilli and empodium present (if pulvilli absent, never with the other characters above). Other combinations of characters 8
- 8(7). Face extremely narrow, the antennal sockets occupying the full width of face. Frons and vertex greatly expanded, *Stichopogon*-like. First flagellomere ovoid., 1.5-2 times width of pedicel. Mystax compact, restricted to oral margin. Two to four postsutural dorsocentral bristles WILLISTONININI, new
 Face never as above. Other combinations of characters 9
- 9(8). Second flagellomere sometimes fused to first flagellomere or second flagellomere entirely absent TILLOBROMINI, new
 Second flagellomere transverse, spoon-shaped, thick and hairy 10
- 10(9). R₄ ending behind wing tip. Alula absent. Ocellar tubercle without strong bristles. Hind femur club-shaped, abruptly enlarged apically. Hind metatarsus conspicuously enlarged, at least as long as subsequent three tarsomeres. Apex of proboscis pointed, opening between labella dorsal and subapical, hypopharynx protruded above and slightly proximad at apex; labella without subapical notch; prementum shorter than labella, with sparse pile restricted to apex. DIOCTRIINI Hull, 1962.

R₄ ending before wing tip. Alula present. Ocellar tubercle with long hairs or bristles curving forward. Hind femur thickened subbasally, or at middle, or gradually enlarged apically. Hind metatarsus shorter than three subsequent tarsomeres. Apex of proboscis rounded, opening terminal; labella with subapical notch; prementum as long as or longer than labella, with abundant pile on entire surface ECHTHODOPINI Adisoemarto & Wood, 1975

11(6). Stump of vein "R₃" (reactivation of R₃ field) present. Extremely pilose flies resembling bumble-bees. Female ovipositor uniquely shaped, forming a long and thin tube devoid of spines PHELLINI Hull, 1962.

Stump of "R₃" absent. Never extremely pilose flies. Female ovipositor with spines on acanthophorites ENIGMOMORPHINI Hull, 1962

LIST OF TRIBES AND GENERA OF AMERICAN STENOPOGONINAE

- | | |
|--|---|
| <p>1. Tribe Acronychini, new
<i>Acronyches</i> Williston, 1908</p> <p>2. Tribe Bathypogonini, new
One new genus from Argentina. Includes also <i>Bathypogon</i> Loew, 1851, from Australia.</p> <p>3. Tribe Ceraturgini, new
<i>Ceraturgus</i> Wiedemann, 1824
<i>Myelaphus</i> Bigot, 1882</p> <p>4. Tribe Cyrtopogonini, new
<i>Ablautus</i> Loew, 1866
<i>Backomyia</i> Wilcox & Martin, 1957
<i>Callinicus</i> Loew, 1872
<i>Cyrtopogon</i> Loew, 1847
<i>Dasycyrtus</i> Philippi, 1865
<i>Dasypecus</i> Philippi, 1865
<i>Eucyrtopogon</i> Curran, 1923
<i>Graptostylus</i> Hull, 1962
<i>Hadrokolos</i> Martin, 1959
<i>Heteropogon</i> Loew, 1847
<i>Itolia</i> Wilcox, 1936
<i>Metapogon</i> Coquillett, 1904
<i>Nannocyrtopogon</i> Wilcox & Martin, 1936.
<i>Pritchardomyia</i> Wilcox, 1965
<i>Sintoria</i> Hull, 1962
<i>Wilcoxia</i> James, 1941
Plus 4 new neotropical genera.</p> <p>5. Tribe Dioctriini Hull, 1962
<i>Dioctria</i> Meigen, 1803
<i>Nannodioctria</i> Wilcox & Martin, 1942</p> | <p>6. Tribe Echthodopini Adisoemarto & Wood, 1975.
<i>Bohartia</i> Hull, 1958
<i>Dicolonus</i> Loew, 1866
<i>Echthodopa</i> Loew, 1866
<i>Eudioctria</i> Wilcox & Martin, 1941
<i>Metadioctria</i> Wilcox & Martin, 1941</p> <p>7. Tribe Enigmomorphini Hull, 1962
<i>Alyssomya</i> Hull, 1962
<i>Archilestris</i> Loew, 1874
<i>Aymarasilus</i> Artigas, 1974
<i>Creolestes</i> Hull, 1962
<i>Cylicomera</i> Lynch Arribálzaga, 1881
<i>Diocranus</i> Loew, 1851
<i>Enigmomorphus</i> Hermann, 1912
<i>Leptochelina</i> Artigas, 1970
<i>Microstylus</i> Macquart, 1838
<i>Pritchardia</i> Stuardo, 1946
<i>Prolepsis</i> Walker, 1851
Plus 3 new neotropical genera.</p> <p>8. Tribe Phellini Hull, 1962
<i>Obelophorus</i> Schiner, 1866</p> <p>9. Tribe Plesiommatini, new
<i>Cystoprosopa</i> Hull, 1962
<i>Dapsilochaetus</i> Hull, 1962
<i>Plesiomma</i> Macquart, 1838</p> <p>10. Tribe Stenopogonini Hull, 1962
<i>Ospriocerus</i> Loew, 1866
<i>Scleropogon</i> Loew, 1866
<i>Stenopogon</i> Loew, 1847</p> |
|--|---|

11. Tribe Tillobromini, new
Coleomya Wilcox & Martin, 1935
Euthrixius Artigas, 1971
Tillobroma Hull, 1962
Zabrotica Hull, 1958
 Plus 3 new neotropical genera.

12. Tribe Willistonini, new
Willistonina Back, 1909

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